

# 实验 11\_OLED 的使用

## 【实验目的】:

- 1、掌握 OLED 的基本原理
- 2、学会 OLED 的使用方法

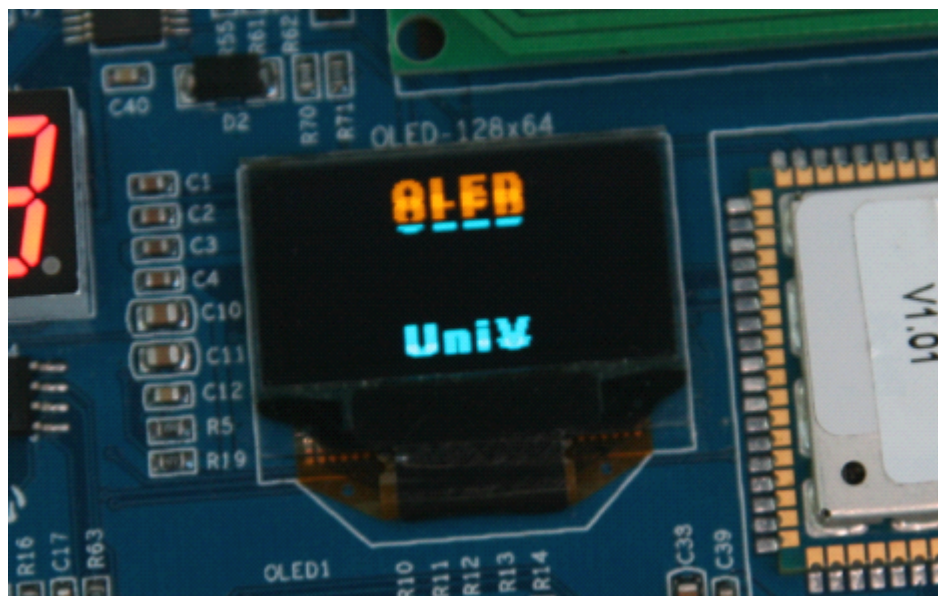
## 【实验环境】:

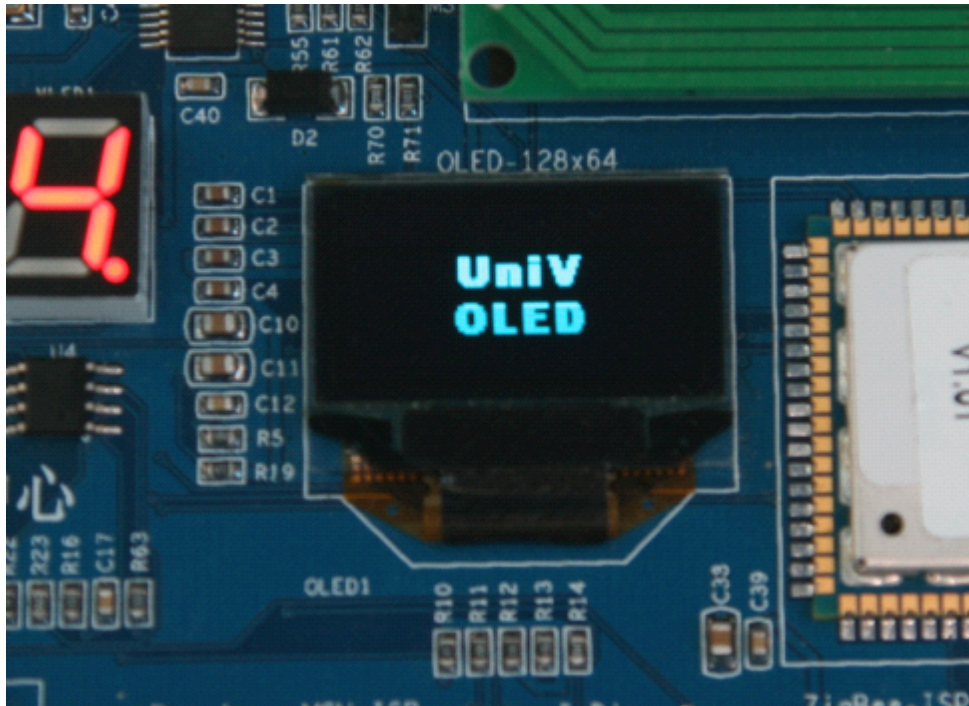
- 1、FS\_11C14 开发板
- 2、FS\_Colink V2.0
- 3、RealView MDK (Keil uVision4)

## 【实验步骤】:

- 1、在 OLED 文件夹下找到并打开 project.uvproj 文件;
- 2、编译此工程;
- 3、通过 FS\_Colink 下载编译好的工程到 FS\_11C14 开发板;
- 4、按 Reset 键复位,转动电位器 (VR1),观察 OLED 显示。

## 【实验现象】





### 【实验分析】

```
void OLED_Test(void)
{
    const unsigned char Name[]={53,78,73,86,73,83,73,79,78,0};
                                                                    // Univision

    Fill_RAM(0x00);          // Clear Screen

    // Show Pattern - UniV OLED
    Show_Pattern((unsigned char *)&UniV[0][0],0x02,0x05,XLevel+0x28,0x30);
    Delay(5);

    // Fade In/Out (Full Screen)
    Fade_Out();
    Delay(5);
    Fade_In();
    Delay(5);

    // Scrolling (Partial or Full Screen)
    Vertical_Scroll(0x00,0x00,Max_Row,0x01,0x20); // Upward
    Delay(5);

    Vertical_Scroll(0x01,0x00,Max_Row,0x01,0x20); // Downward
    Delay(5);

    Deactivate_Scroll();
}
```

```

    Delay(5);
    // Upward - Top Area
    Continuous_Scroll(0x00,0x00,0x00,0x00,0x20,0x01,0x00,0x01);
    Delay(5);
    Continuous_Scroll(0x00,0x00,0x00,0x00,0x20,0x1F,0x00,0x01);    // Downward -
Top Area
    Delay(5);
    Continuous_Scroll(0x00,0x00,0x03,0x00,0x20,0x01,0x00,0x02);    // Up &
Rightward - Top Area
    Delay(5);

    // Down & Leftward - Top Area
    Continuous_Scroll(0x01,0x00,0x03,0x00,0x20,0x1F,0x00,0x02);
    Delay(5);
    Continuous_Scroll(0x01,0x04,0x07,0x00,0x20,0x01,0x00,0x02);    // Upward - Top
Area
    Delay(5);    // Leftward - Bottom Area

    Continuous_Scroll(0x00,0x04,0x07,0x00,0x20,0x1F,0x00,0x02); // Downward - Top
Area
    Delay(5);    // Rightward - Bottom Area

    Deactivate_Scroll();
    Delay(5);

    // All Pixels On (Test Pattern)
    Fill_RAM(0xFF);
    Delay(5);

    // Checkerboard (Test Pattern)
    Checkerboard();
    Delay(5);

    Fill_RAM(0x00);    // Clear Screen

    // Frame (Test Pattern)
    Frame();
    Delay(5);

    // Show String - Univision
    Show_String(1,(unsigned char *)&Name,0x03,XLevel+0x25);
}

```